

RECEIVED

DEC 20 1991

Federal Communications Commission
Office of the Secretary

BEFORE THE

Federal Communications Commission

In the Matter of)
)
Advanced Television Systems)
and Their Impact Upon the)
Existing Broadcast Service)

MM Docket No. 87-268

To: The Commission

COMMENTS OF GOLDEN ORANGE BROADCASTING CO., INC.

Golden Orange Broadcasting Co., Inc. ("Golden Orange"), licensee of independent UHF Television Broadcast Station KDOC-TV, Anaheim, California, pursuant to Section 1.415 of the Commission's Rules, hereby submits its comments in the above-captioned matter regarding implementation of Advanced Television (ATV) service; ATV service will feature improved audio and high resolution video not possible with current television service which is based on National Television Systems Committee (NTSC) transmission standards. In support thereof, the following is set forth.

1. Initial Eligibility. The Commission proposes to allocate, on an interim basis, an additional 6 MHz channel to existing television stations for ATV service; one of the two channels would be surrendered after the television station has converted its operations from NTSC to ATV. Because the goal in this proceeding is to implement major technological improvements in television transmission rather than to establish a new and distinct video broadcasting service, the Commission proposes to restrict initial eligibility for ATV frequencies to existing

0+9
14

television broadcast station licensees, permittees and construction permit applicants as of October 24, 1991, the date of adoption of the Notice of Proposed Rule Making (NPRM) in this proceeding.

2. Golden Orange supports restricting initial eligibility for ATV channels. There is no assurance that there will be sufficient spectrum available to accommodate all eligible parties, particularly in congested major market areas, and it will surely be necessary to displace some LPTV and television translator stations in order to free up supplemental ATV frequencies. Under such circumstances, imposing initial ATV eligibility restrictions is not only appropriate but essential.

3. It is reasonable for the Commission to treat ATV as a qualitative improvement of existing television service, rather than a new and separate video service, and not subject to comparative consideration of mutually exclusive applicants. Once implemented, however, the technological improvements of ATV may be such that ATV will become a de facto new television medium suited to high resolution programming while NTSC operations would continue as a separate television medium broadcasting other types of programming not requiring high resolution; indeed, a continuing need for NTSC service may further restrict the availability of additional ATV channels. Simply stated, there are just too many unknowns at this threshold stage of ATV development to open up scarce frequency spectrum to unrestricted general development.

4. Application and Construction Periods. The Commission proposes to expedite implementation of ATV service to the public. After ATV channel allocations are made, the Commission would require eligible applicants to file an application for the appropriate ATV frequency allocation within three years from the date the ATV allocation is made; after this initial three year period, eligible applicants who do not timely file a construction permit application for an ATV channel would forfeit their priority status and ATV channels would be opened to all qualified applicants. Applicants who are granted a construction permit for an ATV channel allocation would have two years from the date of grant within which to complete construction.

5. Golden Orange believes the Commission's implementation proposal is unrealistic. The Construction and installation costs of ATV transmission and program production facilities, depending on market size and whether existing antenna tower facilities can be used, will be in the range \$5-\$12 million over several years based upon studies conducted by CBS and the Public Broadcasting Service. Moreover, there are no television receivers currently being marketed which are capable of receiving ATV programming; until there are sufficient quantities of receivers available and in the hands of the public, eligible applicants should not be required to undertake substantial capital expenditures which have no relation to marketplace conditions. Indeed, under present economic conditions, many stations would be unable to obtain

necessary financial commitments to even undertake the filing of an ATV construction permit application.^{1/}

6. If the Commission is wedded to a strict timetable for implementation of ATV service, rather than some marketplace standard such as ATV receiver penetration level, Golden Orange believes that it might be a reasonable compromise to double the time periods proposed by the Commission, i.e., eligible applicants must file ATV applications within six years of channel allocation and construct within four years after the construction permit is granted. A longer implementation period would give applicants additional flexibility to implement ATV service as marketplace conditions may warrant.

7. Assignment of ATV Channels. The Commission proposes to allot ATV channels to those communities of license currently listed in the television Table of Allotments set forth at Section 73.606 of the Commission's Rules. The Commission would treat all ATV channels as being equivalent and would randomly pair specific ATV channels to existing NTSC channels listed in the Table of Allotments.^{2/} Provided that there are sufficient ATV channels

^{1/} Golden Orange supports the imposition of a financial qualification showing as a condition for awarding an ATV channel. This financial qualification showing would be the same as is now imposed for applicants for new broadcast facilities since, essentially, implementation of an ATV operation would be the equivalent of constructing a new station.

^{2/} Alternatively, the Commission proposes to allocate ATV channels to a particular community and then assign these channels on a first-come-first-served basis to qualified ATV applicants
(continued...)

available to accommodate all existing licensees, applications for ATV channels within a market would not be considered to be mutually exclusive.^{3/} In order to accommodate preferences for specific ATV channels within a particular market, however, the Commission would permit eligible parties to negotiate among themselves after the award of an ATV channel, subject to the condition that any proceeds from an exchange of channels would be used in connection with the operation of the station's ATV facility.

8. Golden Orange believes that there will be a continuing need for NTSC channels and that those channels should not be entirely eliminated; moreover, the dual channel operation proposed by the Commission during the interim period of converting from NTSC to ATV will be inherently confusing to the public with a plethora of channels and formats to choose from. Accordingly, Golden Orange submits that as an ultimate goal for efficient and convenient spectrum management, the Commission should strive for a single contiguous band of UHF channels for use by ATV stations and a second contiguous band of UHF channels for stations which

2/(...continued)

during an initial window filing period. For purposes of administrative convenience and conservation of Commission resources, Golden Orange does not support this alternative proposal.

3/ In the event that sufficient ATV channels are not available to accommodate every existing licensee in the market, Golden Orange submits that the ATV channel assignments should be made either on the basis of, first, the length of time a licensee has continuously operated the NTSC channel in the market, second, financial qualifications and, third, on a random lottery basis.

ultimately choose to continue operating as NTSC stations. Golden Orange sees no advantage in setting a goal which would eventually allow all current station licensees to convert to ATV operations on their current NTSC channels; VHF channels could be converted for use by auxiliary broadcast facilities, such as studio-transmitter links and intercity relay microwave paths, mobile radio services and other uses.

9. A single contiguous band of ATV channels (most likely in the low UHF band) and a separate contiguous band of UHF channels for continuing NTSC use (most likely in the high UHF band) would have several advantages. It would allow allocation of channels with narrow guardbands, permitting more efficient spacing and a larger number of stations, particularly in crowded metro areas.^{4/}

4/ For example, an ATV band in the approximate position of UHF channels 14 through 43, with alternate vertical and horizontal polarization in major markets and, in other markets, cross polarization to major market co-channel and adjacent channels, would provide a total number of 30 ATV channels and an NTSC band in the approximate position of UHF channels 44 through 69 would result in 26 channels. Only after experiments with digital transmissions have been completed can a definitive determination be made on what spacings are optimum for channel loading and what power levels would be needed at higher UHF channels to retain parity of current service. Additional experiments with digital transmissions may also be advisable to determine the effects of directional or high gain transmit and receive antennas on the characteristics of the signals.

Assignment of new channel numbering to each band would also facilitate public awareness of the technology differences between ATV and NTSC. For example, channels A1 through A24 could be designated as ATV channels (existing NTSC channels operating on VHF frequencies could be assigned corresponding ATV channel designations (e.g., VHF Channel 2 could be assigned ATV Channel A2)) and Channels B1 through B36, for example, could be designated as NTSC channels.

Such an allocation system would lend itself to block conversion procedures and would permit television receivers to be manufactured less expensively. Finally, all stations operating either on ATV or NTSC UHF channels would have near parity in transmission facilities.

10. Although the contiguous ATV/NTSC band proposal advocated by Golden Orange would necessarily involve additional frequency changes by existing stations, the ultimate result would significantly reduce the prospect of public confusion and bring order and parity to the marketplace. However, if such plan has merit, it must be implemented as a necessary component of ATV implementation or the opportunity will be lost.^{5/}

11. **Spectrum Issues.** In the belief that ATV channels can be assigned with smaller channel separations than currently required for NTSC channels and without regard for UHF taboo spacings, the Commission projects that, in most instances, it will be able to provide an additional 6 MHz of frequency spectrum to existing stations for ATV purposes without using vacant spectrum now reserved in specific communities for noncommercial purposes; moreover, an additional 6 MHz of frequency spectrum for ATV purposes can also be associated with existing vacant noncommercial

^{5/} The cost of funding these frequency changes might be offset to some extent by imposing a fee on ATV receivers sold to the public and the funds prorated among affected stations. Contiguous ATV and NTSC bands would simplify receiver requirements and should lower the cost of ATV receivers if random tuning is not required.

allotments. However, in those limited instances where ATV frequency allocations cannot be accomplished but for the use of a vacant noncommercial channel, the Commission proposes to make use of the noncommercial reserved spectrum.

12. The Commission also proposes no change in the secondary status of LPTV and television translator stations; in the event of interference between an ATV channel allocation and existing LPTV/translator operations, those secondary operations must give way to implementation of full service ATV operations.

13. Finally, the Commission does not propose to expand spectrum for auxiliary broadcast services associated with ATV, at least initially, in spite of the existing congestion for auxiliary spectrum, especially in the major market areas; additional auxiliary spectrum is simply not available at this time and alternative technology, such as digital compression, fiber optics and coaxial cable links, could be implemented.

14. Golden Orange supports the Commission's stated intention to reserve ATV channels for noncommercial stations. These noncommercial ATV reservations should not be subject to any deadlines for filing ATV applications or for constructing ATV facilities. In the event that an eligible noncommercial station should choose not to seek an ATV authorization but, rather, to continue operating on its NTSC channel, Golden Orange would permit the noncommercial station to sell its ATV allocation on a non-reserved basis provided that any consideration received by the

noncommercial station would be used in conjunction with its existing NTSC operations or any modifications required of such operations, especially modifications to move to a new frequency in order to implement the contiguous NTSC band advocated by Golden Orange.

15. With respect to auxiliary broadcast spectrum, Golden Orange submits that there is a critical and immediate need for additional auxiliary spectrum not only for ATV purposes but also for existing NTSC operations in congested major markets. For example, the local frequency coordinating committee for the Los Angeles area has stated that there is simply no available microwave frequencies to transmit television programming to Mt. Wilson, the Los Angeles area antenna farm currently used by area television broadcast stations; barring use of fiber optics or some other technology, there is simply no prospect for the availability of additional wide-band microwave channels. Should the Commission adopt the spectrum plan advocated by Golden Orange and place all NTSC and ATV television channels and contiguous frequency blocks in the UHF band, the Commission should set aside a portion of the vacated VHF television frequency spectrum for auxiliary broadcast uses.

16. Conversion to ATV. The Commission has tentatively concluded that it should award existing broadcast stations an additional license for the ATV channel in lieu of treating the addition of an ATV channel as a major modification to the NTSC

license. Under this dual licensing approach, the Commission would not permit an ATV license awarded to an existing NTSC licensee to be transferred independent of the associated NTSC license. The Commission envisions that ATV service will eventually replace existing NTSC service and that, at some point, broadcasters would be required to convert entirely to ATV once that service becomes the prevalent medium; NTSC channels would be surrendered in the interest of conserving scarce frequency spectrum and enhancing the continued development and expansion of ATV stations. Any existing stations which had forfeited its initial eligibility for an ATV channel, either by not applying for or building an ATV facility within the requisite time, would be allowed to directly convert to an ATV channel at the time of required conversion, if feasible, but otherwise would have to cease operating as an NTSC facility.

17. Golden Orange believes there will be an ongoing need for NTSC operations and that ATV and NTSC will develop as separate television services. Because of the potential ongoing need for NTSC operations as well as the substantial cost involved in converting to ATV operations, Golden Orange believes that it may be prudent to permit broadcasters to operate on both ATV and NTSC channels indefinitely; however, if existing stations must choose between operating on ATV or NTSC channels, rather than merely surrendering the NTSC channel, a broadcast station should, if feasible, be permitted to sell that channel in order to recoup the cost of converting its operation to ATV.

18. A number of possible options have been advanced by the Commission for selecting a conversion date for ATV service (and, conversely, a discontinuance of NTSC service). One option would require conversion within a certain period after the nationwide number of ATV receivers had reached a selected penetration rate. A second option would require ATV conversion when a specific ATV receiver penetration rate is achieved on a market-by-market basis rather than on a nationwide basis. A third option would be to merely establish a date certain by which ATV conversion would have to be completed and the NTSC channel surrendered.

19. As previously stated, Golden Orange is of the view that in converting to ATV there is no necessity that NTSC service be terminated. Indeed, some types of programming may simply not be appropriate for broadcast on ATV facilities; rather than consigning such programming to the trash heap because the resolution is unsuitable for ATV transmission, Golden Orange believes that the public would best be served by providing a choice between ATV and NTSC service with corresponding programming best suited to such channels.

20. High resolution programming suitable for conversion to ATV generally must be film or videotape of 35 mm quality or better. Substantial amounts of current television programming, such as older movies and syndicated television programs which are a staple of many stations, especially independent television stations, are not capable of being converted to a high resolution format; in the face of continuing public demand for such programming (for which

stations have incurred substantial expense), it is simply unreasonable to mandate high resolution facilities for broadcast of low resolution programming. As high resolution programming and receivers become increasingly available, it is reasonable to expect that viewers will be drawn to the better image available on ATV facilities; however, Golden Orange believes that there will always be a market for lower resolution programming as well and that ATV and NTSC facilities are not mutually exclusive but, rather, compatible mediums.

21. Each television market is unique and the decision of whether or not to convert to ATV, and at what time to convert, should be left to each individual station in serving the needs of its audience. However, if the Commission is compelled to establish a uniform conversion date by which stations choosing to convert to ATV must do so, Golden Orange submits that stations should not be compelled to convert from NTSC to ATV sooner than five years after ATV receivers obtain a 40% penetration rate nationwide.

22. Simulcasting. In order to protect the existing investment in consumer reception equipment during the transition to ATV service and to ensure that consumers are not forced to purchase new television receivers in order to enjoy quality, over-the-air television service, the Commission is proposing to require that at least a minimal amount or percentage of programming broadcast on the ATV channel is also broadcast on the NTSC channel. Golden Orange believes that the strengths of ATV can only be realized with high resolution programming specifically intended for

that medium. While high resolution ATV programming can be broadcast on NTSC channels, there is little value in converting NTSC programs to ATV broadcast since no real increase in resolution can be achieved.

23. As the operator of an independent UHF station, Golden Orange is interested in acquiring an ATV channel; but it also wants the flexibility to continue its NTSC operations indefinitely with programming that may not be suited or suitable for ATV conversion. Accordingly, Golden Orange does not believe that simulcasting is the best approach to serving the public interest. However, if the Commission does adopt a simulcasting requirement, such requirement should be minimal, for example, only during prime time viewing hours or a portion of prime time hours.

Conclusions

While the expeditious implementation of ATV is a high priority, such implementation should not sacrifice spectrum efficiency and program quality for purposes of expediency; now is the time to create a logical order for channel assignment which recognizes a continuing public need for NTSC service along with the technological benefits of ATV service. The Commission should not impose any artificial timetable for conversion to ATV service but, rather, permit licensees the flexibility to implement ATV service as marketplace conditions may warrant. Finally, in the event there are insufficient ATV channels to accommodate all stations in a particular market, then ATV channel assignments should be made in

- 14 -

the first instance on the length of time a licensee has continuously operated an NTSC channel in the market.

Respectfully submitted

GOLDEN ORANGE BROADCASTING CO., INC.

By

Calvin C. Brack
Calvin C. Brack
Secretary-Treasurer

December 19, 1991